Claims

What is claimed is:

1. A method of separating character-shaped forms from a dual-sheeted dough, comprising:

forming the dual-sheeted dough;

cutting character-shaped forms in the dual-sheeted dough;

applying air pressure to partially detach the character-shaped forms from the dual-sheeted dough; and

routing the dual-sheeted dough having the partially detached character-shaped forms across a frictional surface to separate the character-shaped forms from the dual-sheeted dough.

2. The method of claim 1, wherein the step of cutting character-shaped forms includes the steps of:

providing a cylindrical cutter having rows of character-shaped cut-outs on its surface; and

routing the dual-sheeted dough in proximity to the cylindrical cutter to imbed the character-shaped cut-outs in the dual-sheeted dough.

3. The method of claim 2, further including the steps of:

providing air conduits within the cylindrical cutter underlying each row of character-shaped cut-outs; and

providing holes in the surface of the cylindrical cutter within the character-shaped cut-outs, wherein the holes are open to the underlying air conduit.

4. The method of claim 3, further including the step of applying air pressure into the air conduit and out the holes in the surface of the cylindrical cutter, wherein the air exerts pressure against the character-shaped forms to partially detach

the character-shaped forms from the dual-sheeted dough.

5. The method of claim 4, further including the step of applying a rotating brush to the surface of the cylindrical cutter to remove clinging character-shaped forms.

6. The method of claim 2, further including the steps of:

providing the frictional surface positioned in proximity to the exit point of the dual-sheeted dough having the partially detached character-shaped forms from the cylindrical cutter; and

routing the dual-sheeted dough having the partially detached character-shaped forms across an edge of the frictional surface, wherein the character-shaped forms are dislodged from the dual-sheeted dough by contact with the frictional surface.

7. The method of claim 6, wherein the dual-sheeted dough is routed along one side of the frictional surface and the character-shaped forms fall away in the direction of the opposite facing side of the frictional surface.

8. The method of claim 7, wherein the frictional surface is adjustable in angle with respect to a horizontal surface supporting the frictional surface.

9. The method of claim 8, wherein the frictional surface is adjusted to an angle of about 30 to 40 degrees with respect to the horizontal surface supporting the frictional surface.

10. A method of separating snack food forms from a sheeted dough, comprising:

forming the sheeted dough;

cutting snack food forms into the sheeted dough;

applying air pressure to partially detach the snack food forms from the sheeted dough; and

routing the sheeted dough having the partially detached snack food forms across a frictional surface to separate the snack food forms from the sheeted dough.

11. The method of claim 10, wherein the step of forming the sheeted dough includes the steps of:

forming a first sheet of dough from an agglomerated mixture;

forming a second sheet of dough from the agglomerated mixture; and

combining the first and second sheets of dough to provide a dual-sheeted dough.

12. The method of claim 10, wherein the step of cutting snack food forms includes the steps of:

providing a cylindrical cutter having rows of form cut-outs on its surface; and

routing the sheeted dough in proximity to the cylindrical cutter to imbed the form cut-outs in the sheeted dough.

13. The method of claim 12, further including the steps of:

providing air conduits within the cylindrical cutter underlying each row of form cut-outs; and

providing holes in the surface of the cylindrical cutter within the form cut-outs, wherein the holes are open to the underlying air conduit.

14. The method of claim 13, further including the step of applying air pressure into the air conduit and out the holes in the surface of the cylindrical cutter, wherein the air exerts pressure against the snack food forms to partially detach the snack food forms from the sheeted dough.

15. The method of claim 14, further including the step of applying a rotating brush to the surface of the cylindrical cutter to remove clinging snack food forms.

16. The method of claim 12, further including the steps of:

providing the frictional surface positioned in proximity to the exit point of the sheeted dough having the partially detached snack food forms from the cylindrical cutter; and

routing the sheeted dough having the partially detached snack food forms across an edge of the frictional surface, wherein the snack food forms are dislodged from the sheeted dough by contact with the frictional surface.

17. The method of claim 16, wherein the sheeted dough is routed along one side of the frictional surface and the snack food forms fall away in the direction of the opposite facing side of the frictional surface.

18. The method of claim 17, wherein the frictional surface is adjustable in angle with respect to a horizontal surface supporting the frictional surface.

19. The method of claim 18, wherein the frictional surface is adjusted to an angle of about 30 to 40 degrees with respect to the horizontal surface supporting the frictional surface.

20. An apparatus used in the manufacture of snack food product, comprising:

means for forming the sheeted dough;

a cylindrical cutter receiving the sheeted dough and cutting snack food forms into the sheeted dough;

means for applying air pressure to the cylindrical cutter to at least partially detach the snack food forms from the

sheeted dough; and

a frictional surface disposed at an exit point of the sheeted dough having the partially detached snack food forms from the cylindrical cutter, wherein the frictional surface separates the snack food forms from the sheeted dough.

21. The apparatus of claim 20, further including:

means for forming a first sheet of dough from an agglomerated mixture;

means for forming a second sheet of dough from the agglomerated mixture; and

means for combining the first and second sheets of dough to provide a dual-sheeted dough.

22. The apparatus of claim 20, wherein the cylindrical cutter includes rows of form cut-outs on its surface so that the sheeted dough is routed in proximity to the cylindrical cutter to imbed the form cut-outs in the sheeted dough.

23. The apparatus of claim 22, further including the steps of:

a plurality of air conduits disposed within the cylindrical cutter underlying each row of form cut-outs; and

a plurality of holes disposed in the surface of the cylindrical cutter within the form cut-outs, wherein the holes are open to the underlying air conduit.

24. The apparatus of claim 23, wherein air pressure is applied into the air conduit and out the holes in the surface of the cylindrical cutter to exert pressure against the snack food forms to at least partially detach the snack food forms from the sheeted dough.

25. The apparatus of claim 24, further including a rotating brush disposed in proximity to the surface of the cylindrical

cutter to remove clinging snack food forms.

26. The apparatus of claim 22, wherein the sheeted dough having the partially detached snack food forms is routed across an edge of the frictional surface so that the snack food forms are dislodged from the sheeted dough by contact with the frictional surface.

27. The apparatus of claim 26, wherein the sheeted dough is routed along one side of the frictional surface and the snack food forms fall away in the direction of the opposite facing side of the frictional surface.

28. The apparatus of claim 27, wherein the frictional surface is adjustable in angle with respect to a horizontal surface supporting the frictional surface.

29. The apparatus of claim 28, wherein the frictional surface is adjusted to an angle of about 30 to 40 degrees with respect to the horizontal surface supporting the frictional surface.